

IN THE CLAIMS:

Please amend the claims as follows:

1-11 (cancelled).

12 (currently amended). A method of providing high availability in a rack computer system including a microprocessor having a system management mode and including manually replaceable component cards, the method comprising:

detecting initiation of manual removal of a component card;

storing state information concerning the component card according to code executed in the system management mode;

shutting off power to the component card being removed; and

delivering the stored state information to a replacement card to ensure availability of the functions provided by the component card being removed.

13 (currently amended). The method of claim 12, further comprising:

before delivering the state information to the replacement card,

~~determining~~ determining whether one of:

- i) a replacement card has been inserted to replace the removed card, and
- ii) a pre-installed stand-by component can be used as a substitute for the

removed card.

14 (original). A telecommunication system having high availability comprising:

a media gateway for converting between POTS voice traffic and IP voice traffic, the media gateway including a processor having a system management mode that executes code to monitor a state of the media gateway;

a signaling gateway for converting between POTS signaling traffic and IP signaling traffic, the signaling gateway including a processor having a system management mode that executes code to monitor a state of the signaling gateway;

a gateway controller coupled to the signaling gateway for receiving signaling messages there from and determining IP routing addresses corresponding to telephone numbers, the gateway controller including a processor having a system management mode that executes code to monitor a state of the gateway controller; and

a high availability system controller coupled to all of the media gateway, the signaling gateway and the gateway controller, the high availability system controller having policy and procedure code configured to execute when triggered by at least one of the media gateway, the signaling gateway and the gateway controller in response to at least one event.

15 (original). The telecommunication system of claim 14, wherein, if a malfunction occurs, the high availability system controller is alerted from the state information provided by one or more components, and the policy and procedure code executes a diagnostic routine to determine a cause of the malfunction and initiates a power-down procedure for all malfunctioning components.

16 (original). The telecommunication system of claim 15, wherein the policy and procedure code includes routines to activate replacement components to cover for malfunctioning components.

17 (original). The telecommunication system of claim 16, wherein the policy and procedure code includes routines for rerouting voice and signaling traffic to maintain quality of service.

18 (new). A system, comprising:

one or more microprocessors each including a system management mode (SMM) operating at a firmware level independent of an operating system,

wherein the SMM saves state information to be used to speed up resetting of the system after a detected malfunction; and

a system controller connected between the SMM of the one or more

microprocessors, the system controller to receive the state information after the malfunction and transmitting back corrective procedures based on stored policies.

19 (new). The system as recited in claim 18, wherein the one or more microprocessors comprises:

- a first microprocessor including a system management mode (SMM) located in a media gateway;

- a second microprocessor including a system management mode (SMM) located in a gateway controller; and

- a third microprocessor including a system management mode (SMM) located in signaling gateway,

wherein the media gateway, the gateway controller, and the signaling gateway comprise a voice-over Internet Protocol (VoIP) telecommunications system.

20 (new). The system as recited in claim 18, wherein the one or more microprocessors comprises a rack computer system further including a plurality of computer cards and the malfunction includes the removal of one of the computer cards.